REPORT / RECOMMENDATION

To: Edina Transportation Commission

Agenda Item #: VI. C.

From: Mark K. Nolan, AICP – Transportation Planner

Action ☒
Discussion ☐
Information ☐

Date: January 16, 2014

Subject: Traffic Safety Committee Report of January 2, 2014

Action Requested:
Review and recommend Traffic Safety Committee (TSC) Report of Thursday January 2, 2014, be forwarded to City Council for approval.

Information / Background:
It is not anticipated that residents will be in attendance at the meeting regarding any of the attached issues. An overview of the comments from the Edina Transportation Commission (ETC) will be included in the staff report provided to Council for their February 18, 2014, meeting.

Attachments:
Traffic Safety Committee Report for January 2, 2014.

G:\Engineering\Infrastructure\Streets\Traffic\Traffic Safety Committee\Staff Review Summaries\14 TSAC & Min\01-02-14 Cover.docx

TRAFFIC SAFETY COMMITTEE REPORT

Thursday, January 2, 2014

The Traffic Safety Committee (TSC) review of traffic safety matters occurred on January 2. The Interim City Engineer, Public Works Director, Transportation Planner, Traffic Safety Coordinator, Sign Coordinator and the Assistant City Planner were in attendance for this meeting.

From these reviews, the recommendations below are provided. On each of the items, persons involved have been contacted and staff recommendation has been discussed with them. They were informed that if they disagree with the recommendation or have additional facts to present, they can be included on the January 16 Edina Transportation Commission and the February 18 City Council agenda.

SECTION A:
Request on which the Committee recommends approval:

A1. Request for more or improved signage for "do not block intersection" signs at intersection of Rabun Drive and 70th Street.

This request comes from a resident living in the neighborhood to the north of the intersection. The requestor states; vehicles are blocking the intersection of Rabun Drive and 70th Street during peak rush hour times, particularly between 4 and 5 pm. Vehicles are ignoring the "do not block intersection" signs.

Picture: Rabun Dr. and 70th St. taken from Google maps

The requestor would like to see more or improved signage for "do not block intersection".

Currently there are two do not block intersection signs located on eastbound 70th Street, located at the intersection. 70th Street is a divided 4 lane roadway. The south leg of the intersection is an entrance for a parking lot. The north leg of the intersection, Rabun Drive, is the only entrance on the south side of Brookview Heights neighborhood.

The MNMUTCD does not give further recommendations for placement of "do not block intersection" signs, only stating "Traffic Signal signs may be installed at certain locations to clarify signal control. It is stated "A STATE LAW plaque (R4-X5) may be installed above these signs to remind road users that the regulation applies at all locations."

After discussion the staff recommends installation of orange plaques above and below the existing "do not block intersection" signs to help draw attention to the signs.

Map: Rabun Dr. and 70th St.

SECTION B:
Requests on which the Committee recommends denial:

B1. Request for additional signage for crosswalk at the intersection of South View Lane and Dalrymple Road.

This request comes from a resident who lives on Dalrymple Road. The requestor states; traffic is not yielding to pedestrians. The resident would like additional signage to help warn drivers of pedestrians in the area.

This location is near schools and a community center. Currently there's a painted crosswalk with pedestrian crossing signs, a sidewalk on the south side of the road and a pedestrian landing on the north side. There is a stop sign on southbound Dalrymple. There are no recorded crashes at the intersection of South View and Dalrymple.

The criterion for placement of crosswalks and type of control is outlined in the Appendix section 2A.

Map: South View and Dalrymple

Counts of pedestrians were taken at the intersection. A maximum total of 19 pedestrians were recorded crossing South View Lane within a two-hour period. The ADT for this intersection is 3701 vehicles with the peak hour being 7:00 am. A gap study was performed during the peak hour, resulting in 8.8 gaps.

After discussion the staff recommends denying the request for additional signage, since existing signage and markings are already adequate based on the city policy.

Photo: South View Ln and Dalrymple Rd from the north

B2. Request for a No U-Turn sign in the area of the Benton Avenue parking bay.

This request came from a City of Edina employee. The requestor states; vehicles are making U-Turns in a parking bay at the intersection of Benton Avenue and Tracy Avenue. This might cause a traffic safety concern. The requestor would like to see a no U-Turn sign installed in the area.

Currently Benton Avenue has a one-way traffic circle with three exists. There are parking bays on the west and east sides of the traffic circle as shown on the map.

Map: Benton Ave. parking bay

A traffic study was performed, with a camera set up to the west of the parking bay. In a 24 hour period; 2839 vehicles passed the parking bay, 5 vehicles parked in this area, 1 vehicle performed a U-Turn.

After discussion the staff recommends denying the request for a No U-Turn sign.

B3. Request for replacing the Yield signs with Stop signs at the intersection of St. Johns Avenue and Garrison Lane.

This request comes from a resident living near the intersection. The requestor states; vehicles crossing St. Johns Avenue are being hit by people going too fast down St. Johns. Also, the Yield signs on Garrison and Ashcroft Lanes are hard to see and are not being observed. Currently there are Yield signs for traffic crossing St. Johns Avenue.

The criterion for placement of Stop signs is found in the Appendix section 1A.

In 2000 a traffic count was completed for St. Johns Avenue north of Garrison Lane resulting in an ADT of 101, and an 85th percentile speed of 26.9 mph. In 2004 a traffic count was completed for Garrison Lane east of St. Johns resulting in an ADT of 212 and an 85th percentile speed of 28 mph. There are two recorded auto crashes; a crash resulting in property damage in 2002, and a crash resulting in personal injury in 2013.

Photo: St. Johns Ave. looking south

During the December 4, 2013 meeting, the traffic safety committee recommended looking further into the crash from 2013 to determine if it was an unavoidable crash. In an overview of the crash, the driver of the vehicle struck crossing St. Johns slowed down, but did not see the vehicle traveling down St. Johns. It was noted the Yield sign has a tree near it with a branch hanging down which may or may not be blocking the Yield sign.

After discussion the staff recommends denying the request for replacing the Yield signs with Stop signs. Staff will check to make sure the Yield signs are clear of obstruction.

SECTION C:
Requests that are deferred to a later date:

C1. Request for "police enforcement or signage" at the crosswalk located at the intersection of York Avenue and Edinborough Way.

This request comes from a resident who lives in the area and states; the crosswalk on the north leg of the York Avenue and Edinborough Way intersection is "dangerous". They state "very few cars stop for pedestrians in the crosswalk. Also, there are senior living apartments nearby." The requestor would like for police enforcement or signage at the crosswalk.

Map: York Ave. and Edinborough Way

Currently there exist crosswalks on the north and west legs of the intersection, but without any signage. There is a median, crossing island, crossing York Avenue which can be used as a safe haven for pedestrians. There are stop signs on Edinborough Way. The speed limit on York Avenue is 35 mph.

The criterion for placement of crosswalks can be found in the Appendix section 2A.

Picture: York Ave and Edinborough Way from NW

The ADT for this intersection was found to be 11,662, with the peak hour occurring at 4:45 pm. A gap study was performed during this peak hour. The MNDOT Traffic Signal Timing and Coordination Manual states on divided roadways; *a divided road is one with a median island over 6 feet wide and includes a pedestrian pushbutton in the median. If a pushbutton is not in the median, the recommended practice, pedestrian clearance interval must cross them completely from near side curb to far side curb.* This means for the gap study the crossing island should not be considered a "safe haven". The gap study resulted in 0.8 gaps on average for a 5 minute period. If the crossing island were to be considered a "safe haven", the gaps for northbound traffic were 10.5 and for southbound traffic were 14.3 gaps on average for a 5 minute period. The Local Traffic Control list recommends installation of an overhead mounted flasher for less than 3 gaps, and pavement markings and signage for above 5 gaps.

After discussion the staff recommends further study and communicating with Hennepin County before making a recommendation.

C2. Request for additional signage for the crosswalk at the intersection of York Avenue and Parklawn Avenue.

This request comes from a resident who lives in the area. The requestor states; traffic does not stop for pedestrians crossing the street at the intersection of Parklawn Avenue and York Avenue. The requestor would like additional signage in the area.

Map: York Ave. and Parklawn Ave.

Currently there are painted crosswalks on the south and west legs of the intersection. There are crosswalk warning signs located on York Avenue north, south, and immediately at the crosswalk. No signage is located on Parklawn Avenue. York Avenue is 6 lanes wide, including 2 turn lanes at the crosswalk, with a distance of 126 feet from curb to curb. Parklawn is 4 lanes wide, with a distance of 65 feet from curb to curb. There have been 9 accidents at this intersection since 2009.

The criterion for placement of crosswalks can be found in the Appendix section 2A.

A traffic gap count was taken during the peak hour, 5 pm. The average gaps per 5 minute period on York Avenue were 0. The average gaps per 5 minute period going across Parklawn Avenue were 1.7. Both of these were below 3 gaps, according to the Local Traffic Control list it's recommended to install an overhead mounted flasher.

After discussion the staff recommends further study and communicating with Hennepin County before making a recommendation.

Picture: York Ave. and Parklawn Ave. from the south

C3. Request for an All-Way Stop sign at the intersection of Valley View Road and Valley Lane.

This request comes from a resident who uses the intersection. The requestor states; the volume of vehicles at the intersection of Valley View Road and Valley Lane is causing delays and possible traffic safety issues. The requestor would like for an All-Way Stop sign at the intersection.

Currently there exist a stop sign on Valley Lane westbound. There is a left turn lane for southbound Valley View Road. There are 8 recorded crashes at this intersection since 2008, including several failures to yield the right-of-way and a vehicle making a left turn.

Picture: Valley View Rd. and Valley Ln. facing west

The criterion for installation of Multi-Way Stop signs is found in the Appendix section 1B.

The volume of traffic entering the intersection from Valley View Road (major street) did not average at least 200 vehicles per hour over the same 8 hour period. There were a total of 980 southbound left turns, 712 northbound right turns, 842 westbound right turns and 374 westbound left turns during the 24 hour study.

Valley View Road vs. Valley Lane: Vehicles per Hour

Time	Vehicles Per Hour Major	Vehicles Per Hour Minor
10:00	351	66
11:00	365	46
12:00	386	69
13:00	451	69
14:00	454	91
15:00	438	65
16:00	501	99
17:00	707	112
18:00	934	112
19:00	588	83
20:00	377	58
Average	**505**	**79**

Map: Valley View Rd. and Valley Ln.

After discussion the staff recommends including study of this intersection along with traffic analysis of Tracy / TH 62 associated with future Tracy Avenue reconstruction before making a recommendation.

Peak Hour Turning Movements

SB Left Turns	NB Right Turns	WB Left Turns	WB Right Turns
166	260	33	79

Peak Hour: 5 p.m. 1046 vehicles through intersection

C4. Request for an All-Way Stop or a traffic signal at the intersection of Valley View Road and Tracy Avenue.

This request comes from a resident in the area. The requestor states; trying to cross Tracy Avenue is impossible to do at peak driving times. The requestor would like to see an All-Way Stop or a traffic signal at this intersection.

Currently there are stop signs located on westbound Valley View Road and the exit ramp from highway 62. The exit ramp has a right turn only lane and a left turn or through lane. Tracy Avenue has a left turn only lane northbound. The closest stop signs on Tracy Avenue are located at Olinger Boulevard to the north, and no close stop signs are located to the south.
The criterion for placement of All-Way Stop signs is found in the Appendix section 1B.

Picture: Tracy Ave. and Valley View Rd. from north

There most reported crashes in a 12-month period were four from 4/06 through 4/07, all of which were right angle collisions due to a failure to yield the right-of-way. As shown in the above table, during an 8 hour period greater than 300 vehicles per hour entered the major street approaches and greater than 200 vehicles per hour entered the minor street approaches. The average delay for vehicles crossing Tracy Avenue was calculated during the peak hour for the minor approaches, 17:30 to 18:30. The average delay was calculated to be 54 seconds. It should be noted this delay may have been greater, only vehicles which could be seen were counted, some vehicles may have been out of view of the camera. This delay is still greater than the minimum requirement of 30 seconds.

Map: Tracy Ave. and Valley View Rd.

After discussion the staff recommends including study of this intersection along with traffic analysis of Tracy / TH 62 associated with future Tracy Avenue reconstruction before making a recommendation.

C5. Request for No Parking or No Pick Up on Gleason Road in front of Creek Valley Elementary School.

This request comes from a resident living in the area, they drive Gleason Road frequently. The requestor states; vehicles picking up children after school, at approximately 4 pm, are parking on and blocking Gleason Road, making it unsafe for travel. The requestor would like to see No Parking or No Pick Up on Gleason Road in front of the school.

Currently there is a school speed limit of 20 mph on Gleason Road. There is No Parking on the east side of the road. There is No Parking on the east side of the road. There is an area for student drop off / pick up located on the school property as seen on the map. Gleason Road is 34 feet wide in this area.

Map: Gleason Rd. at Creek Valley School

Tracy Ave and Valley View Rd: Vehicles per hour

Hour	SB / NB	EB / WB
12:30	387	192
13:30	339	217
14:30	539	235
15:30	879	268
16:30	949	254
17:30	998	334
18:30	766	318
19:30	354	225
Average	651	255

Picture: Gleason Rd. from the south

After discussion the staff recommends coordination with the Parks Department and the School District for further study.

SECTION D:

Other traffic related issues handled.

D1. Email from resident concerning semi/trailer traffic down residential streets in 'Presidents' neighborhood. The resident would like for their concerns to be communicated with Super Value. Super Value was contacted, and agreed to send out a memo to drivers asking them not to use residential streets. The resident was informed of inquiry with Super Value.

D2. Request was made for a Deaf Child sign to be installed on Bonnie Brae Drive. This was approved to be installed, will need to wait for spring to install due to frozen ground.

D3. Email from resident concerned with vehicles through the turn lane to Normandale Road (south) and cutting people off to continue east on West 70th Street. The resident would like to see an occasional posting of a patrol car at the intersection. This request was forwarded to the Edina Police Department.

Appendix

1A. (MNMUTCD 2B.4) YIELD or STOP signs should be used at an intersection if one or more of the following conditions exist:

A. An intersection of a less important road with a main road where application of the normal right-of-way rule would not be expected to provide reasonable compliance with the law;
B. A street entering a designated through highway or street; and/or
C. An un-signalized intersection in a signalized area.

In addition, the use of YIELD or STOP signs should be considered at the intersection of two minor streets or local roads where the intersection has more than three approaches and where one or more of the following conditions exist:

A. The combined vehicular, bicycle, and pedestrian volume entering the intersection from all approaches averages more the 2,000 units per day;
B. The ability to see conflicting traffic on an approach is not sufficient to allow a road user to stop or yield in compliance with the normal right-of-way rule if such stopping or yielding is necessary; and/or
C. Crash records indicate that five or more crashes that involve the failure to yield the right-of-way rule have been reported within a 3-year period, or that three or more such crashes have been reported within a 2-year period.

YIELD or STOP signs should not be used for speed control.

1B. (MNMUTCD 2B.7) Multi-Way STOP

The following criteria should be considered in the engineering study for a multi-way STOP sign installation:

A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
C. Minimum volumes:
   1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
   2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
   3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

Other criteria that may be considered in an engineering study include:

A. The need to control left-turn conflicts;
B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;
C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and

D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

2A. Marked Pedestrian Crosswalks

A. Marked crosswalks are placed at locations that are unusually hazardous or at locations not readily apparent as having pedestrian movement.

B. Marked crosswalks will only be placed in an area that has in excess of 20 pedestrians crossing for a minimum of two hours during any eight hour period.

C. Marking for crosswalks will be established by measuring the "Vehicle Gap Time". This is the total number of gaps between vehicular traffic recorded during the average five minute period in the peak hour. Criteria for markings are:

1. More than five gaps – Pavement marking and signage only.
2. Four to five gaps – add activated pedestal mounted flasher
3. Less than three gaps – add activated overhead mounted flasher.

D. Crosswalks will not be placed on arterial roads or roads with a speed limit greater than 30 mph unless in conjunction with signalization.

E. Other conditions that warrant crosswalks:

1. Routes to schools
2. Locations adjacent to libraries, community centers, and other high use public facilities.
3. Locations adjacent to public parks.
4. Locations where significant numbers of handicapped persons cross a street.
5. Locations where significant numbers of senior citizens cross a street.

F. Crosswalks will only be placed at intersections.